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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,549	02/17/2004	Matti Hamalainen	6009-4624US1	3360
27123	7590	08/11/2005		
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			EXAMINER WYSZOMIERSKI, GEORGE P	
			ART UNIT	PAPER NUMBER
			1742	
DATE MAILED: 08/11/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/781,549

Applicant(s)

HAMALAINEN ET AL.

Examiner

George P. Wyszomierski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/17/04 (Continuation Application).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/17/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. The preliminary amendment filed with this Continuation application on February 17, 2004 has been entered. Claims 28-31 are pending.

Claim Interpretation

2. The examiner notes the following with respect to the instant claims:

- a) Claim 28, line 4 improperly recites the term "grain size" when clearly a "particle size" is intended. Page 12 of the specification indicates that the "grain size" was determined by sieve analysis. Such a procedure would not reveal the grain size of a metal powder, but rather the particle size.

- b) Claim 28 requires that precisely 50% of the powder have a "grain size" greater than about 0.050 mm (50 microns).

- c) Claim 28 recites a grain size (i.e. particle size) of 0.050 mm or 50 microns. The examiner notes that this is equivalent to approximately 300 mesh; see page 5 of Schwarzkopf.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 28, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bakker (U.S. Patent 3,966,886).

Bakker example 4 discloses ferro nickel ground to a 300 mesh (.050 mm) powder. Bakker does not state that precisely 50% of such powder is greater than this size, and does not specify the iron content of instant claims 30 or 31. However, it is a reasonable assumption that the size disclosed by the prior art is an average or median size, and thus a powder in accord

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with claim 28 would not be patentably distinguishable from that of the prior art. With regard to the iron content, the disclosure of ferro nickel powder in general would include powders having an iron content as presently claimed. Consequently, a prima facie case of obviousness is established between the disclosure of Bakker and the presently claimed invention.

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hagenbach et al. (U.S. patent 4,223,085).

Hagenbach discloses magnetic carrier particles, i.e. nickel particles, and at column 5, lines 3-4, indicates that particularly useful results are obtained with an average particle size of 50 microns (0.050 mm). While the prior art does not specify that precisely 50% of the particles are larger than this size, the disclosure of this size by Hagenbach as a particularly useful average size would render the presently claimed products obvious to one of ordinary skill in the art.

6. Claims 28, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Litchfield et al. (U.S. Patent 4,330,575).

Litchfield column 2, lines 23-34 discloses a composition including particles of nickel and including up to 1.5% by weight of iron. The particle size range disclosed by Litchfield includes the size as recited in the instant claims. While the prior art does not specify that precisely 50% of the particles are larger than 50 microns, it is a reasonable assumption that the size figures given in the prior art are in fact an average or median size. Thus, the disclosure of Litchfield et al. creates a prima facie case of obviousness of the presently claimed invention.

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7. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Evans et al. Institution of Mining and Metallurgy article.

Evans et al. discloses the production of nickel powder by hydrogen reduction of a sulphate solution with a catalyst at temperatures and pressures as recited in instant claim 29 see pp. 840-841 of Evans. Then, page 844 of Evans indicates that the powders produced are of fine particle size, and are densified through a series of densification cycles from a size of 20-30 microns to a size of 200-250 microns. While the prior art never specifies that precisely 50% of the particles are larger than 0.050 mm, it is a reasonable assumption that, in going from the smaller size to the larger size through the densification cycles, at some point 50% of the particles would possess the size required by the instant claims. Thus, a prima facie case of obviousness is established between the disclosure of Evans et al. and the presently claimed invention.

8. Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Benson et al. Mines Research Foundation article.

Benson discloses nickel powder made by catalyst assisted hydrogen reduction of sulphate solutions. On page 747 of Benson, the Grade F material appears to be of a size which meets the limitations of the instant claims. Benson does not specify that precisely 50% of the powders of the prior art are greater than a specified size, and does not disclose the iron content recited in instant claims 30 and 31. However, it is clear from the Table on page 747 of Benson that powders meeting the size requirement as claimed would fall within the purview of Benson. With respect to iron, page 743 of Benson indicates that a nucleating agent charge made of a ferrous sulphate water slurry is used when making the Benson powders, and the examiner's position is that one of skill in the art would easily have been able to prepare a powder containing

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the stated amount of iron using the Benson process, i.e. some iron from the process disclosed in Benson would inevitably end up as impurity in the final product. Consequently, a prima facie case of obviousness is established between the disclosure of Benson and the presently claimed invention.

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bakker et al., Hagenbach et al., or Litchfield et al., any one of which alone or in view of Evans et al. or Benson et al.

The Bakker, Hagenbach, and Litchfield patents, discussed supra, do not disclose the process steps recited in product-by-process terms in the present claim. However, it is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, differing only in the manner by which it is made, the burden falls to applicant to show that any process steps associated therewith result in a product materially different from that disclosed in the prior art. See *In re Brown* (173 USPQ 685) and *In re Fessman* (180 USPQ 524). Therefore, the disclosures of Bakker, Hagenbach, or Litchfield are held to be equally applicable to instant claims 29 as they are to claim 28, for reasons as set forth in items 4, 5 and 6 supra.


At a minimum, it is noted that the Evans and Benson disclosures indicate that it is known in the art to form nickel powders of the size as presently claimed by process steps analogous to those set forth in the instant claims. Consequently, at the very least, the combination of any of Bakker, Hagenbach et al., or Litchfield et al., together with the disclosure of Evans et al. or Benson et al., would have taught the claimed invention to one of ordinary skill in the art.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. Effective July 15, 2005, all patent application related correspondence transmitted by facsimile must be directed to the new central facsimile number, (571)-273-8300. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


GEORGE WYSZOMIERSKI
PRIMARY EXAMINER
GROUP 1742

GPW

August 8, 2005